



1786

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Christophe Pierrat et al.

Title: SYSTEM AND METHOD FOR OPTIMIZING PRINTING OF A PHASE SHIFT MASK HAVING A PHASE SHIFT ERROR

Docket No.: 303.311US2

Serial No.: 09/503,553

Filed: February 11, 2000

Due Date: N/A

Examiner: Unknown

Group Art Unit: Unknown

Commissioner for Patents
Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

- X A return postcard.
- X A Supplemental Preliminary Amendment (9 Pages).
- X A check in the amount of \$1400.00 to cover the fee for additional claims as calculated below.

If an additional fee is required due to changes to the claims, the fee has been calculated as follows:

| CLAIMS AS AMENDED | | | | | | |
|---|--|---|--|-------------------------|--------|-----------|
| | (1) Claims Remaining After Amendment | | (2) Highest Number Previously Paid For | (3) Present Extra | Rate | Fee |
| TOTAL CLAIMS | 40 | - | 20 | 20 | x 18 = | \$360.00 |
| INDEPENDENT CLAIMS | 16 | - | 3 | 13 | x 80 = | \$1040.00 |
| [] MULTIPLE DEPENDENT CLAIMS PRESENTED | | | | | | \$0.00 |
| TOTAL | | | | | | \$1400.00 |

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

By: Marvin L. Beekman
Atty: Marvin L. Beekman
Reg. No. 38,377

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 16 day of November, 2000.

Name Tina Pugh

Signature Tina Pugh

Customer Number **21186**

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
(GENERAL)

P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

S/N 09/503,553

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Christophe Pierrat et al.

Examiner: Unknown

Serial No.: 09/503,553

Group Art Unit: Unknown

Filed: February 11, 2000

Docket: 303.311US2

Title: SYSTEM AND METHOD FOR OPTIMIZING PRINTING OF A PHASE
SHIFT MASK HAVING A PHASE SHIFT ERROR (as amended)

SUPPLEMENTAL PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Before taking up the above-identified application for examination, please enter the following amendments.

IN THE TITLE

Please amend the title to read as follows:

“SYSTEM AND METHOD FOR OPTIMIZING PRINTING OF A PHASE SHIFT
MASK HAVING A PHASE SHIFT ERROR”

IN THE CLAIMS

Please cancel claim 1 after adding the following new claims:

23. (New) A system, comprising:
an illuminator;
a phase shifting mask; and
a restrictor adapted for adjusting illumination parameters to compensate for a phase shift error in the phase shifting mask.
24. (New) The system of claim 23, wherein the restrictor provides off-axis illumination.
25. (New) The system of claim 23, wherein the restrictor optimizes printing of the alternating phase shifting mask using empirical data taken from one or more simulations of an image on the alternating phase shifting mask.

11/28/2000 YPOLITE1 00000035 09503553

01 FC:102
02 FC:103

1040.00 0P
360.00 0P